

STUDIES OF NEW MEXICO ANTS. XIII.
THE GENERA ACANTHOMYOPS,
MYRMECOCYSTUS, AND POLYERGUS
(HYMENOPTERA: FORMICIDAE)¹

A. C. COLE

The University of Tennessee, Knoxville, Tennessee

Genus ACANTHOMYOPS Mayr

Acanthomyops claviger (Roger). Nests were found beneath stones on dry, grassy slopes with scattered pine or pinyon-juniper and for the most part contained large populations. The ant was taken at the following localities: Bandler Natl. Monument, 6,200 ft.; 5 mi. S. of Mescalero Natl. Monument, 6,950 ft.; 2 mi. N. of Ute Park, 7,450 ft.; 2 mi. W. of Datil, 7,500 ft.; 16 mi. E. of Raton, 6,650 ft.

Acanthomyops claviger coloradensis (Emery). Colonies were found beneath stones at Capulin Mountain National Monument (7,100-7,200 ft.) in open grassy areas with scrub oak, pine, and cedar.

Acanthomyops interjectus (Mayr). Colonies were under stones on moist pine slopes at the following places: 12 mi. E. of Taos, 7,250 ft.; Black Canyon, Black Mts., 6,600 ft.

Acanthomyops latipes (Walsh). Nests were for the most part beneath stones on both dry and moist, grassy, pine slopes but one colony had constructed an earthen crater around its entrance. Collections were made at the following places: Clayton, 5,200 ft.; Capulin Mt. Natl. Monument, 7,750 ft.; 2 mi. S. of Raton Pass, 7,700 ft.; 16 mi. E. of Raton, 6,650 ft.; Cimarron Canyon, 7,100 ft.; 5 mi. E. of Eagle Nest, 8,600 ft.; 25 mi. N. of Beaverhead, 7,250 ft.; Sapello Canyon, near Beulah, 7,000 ft.; Little Willow Creek Canyon, Mogollon Mt., 8,300 ft.

Genus MYRMECOCYSTUS Wesmæli

Myrmecocystus comatus Wheeler. I have been able to separate the workers of this species from those of *mendax* only on the basis of pilosity differences. The hairs of *comatus* are long, flexuous, and attenuated whereas those of *mendax* are short, stiff, and more equal in length. The height and thickness of the petiolar scale are equally variable in both species. *M. comatus* was collected at elevations varying from 2,750 to 6,950 feet, and *mendax* at places ranging from 3,900 to 7,200 ft. Both species show considerable variation in nest structure and in habitat and are important components of the more arid sections of the state. Localities from which *comatus* was collected are as follows: 16 mi. W. of Socorro (Water Canyon, 6,550 ft.); 25 mi. E. of Bernardo, 5,950 ft.; 25 mi. N. of Bernardo, 6,550 ft.; Malpais Lava Beds, near Carizozo; Texas-New Mexico line on U.S. 180 and 62; Las Cruces, 2,750 ft.; 5 mi. S. of Raton Pass, 6,400 ft.; 16 mi. E. of Raton, 6,650 ft.; 20 mi. W. of Raton, 6,950 ft.; Cimarron Canyon, 6,700 ft.; 15 mi. E. of Silver City, 6,900 ft.; Hobbs, 3,750 ft.

Myrmecocystus mendax Wheeler. This common species was taken at the following representative localities: 9 mi. W. of Glenrio, 3,900 ft.; 3 mi. W. of Tucumcari, 4,200 ft.; Santa Rosa, 4,650 ft.; 25 mi. S. of Las Vegas, 5,500 ft.; 9 mi. E. of Mountainair, 6,025 ft.; 70 mi. N. of Silver City (Wilderness Area, 7,200 ft.); 20 mi. N. of Silver City, 6,400 ft.; 6 mi. NW. of Deming, 4,550 ft.; Gallup (Kit Carson Cave road, 6,950 ft.); 25 mi. E. of Gallup, 7,200 ft.; 20 mi. E. of Alma, 6,400 ft.; 10 mi. S. of Santa Fe, 6,500 ft.

¹Contribution No. 90, Department of Zoology and Entomology, The University of Tennessee. These studies were aided by grants from the Penrose Fund of the American Philosophical Society.

Myrmecocystus mexicanus Wesmael. The typical *mexicanus* is apparently not commonly represented in New Mexico. Pebble mounds with deep circular craters and large entrances were found at the following places: 28 mi. N. of Las Cruces; 15 mi. E. of Silver City, 6,900 ft.; 2 mi. E. of Hobbs, 3,750 ft. At each of these localities nests were rather numerous in open semidesert.

Myrmecocystus mexicanus hortideorum McCook. This subspecies seems to have a more northern range in the state than does *mexicanus*. Pebble and sand crater mounds were numerous at the following representative places: 25 mi. E. of Gallup, 7,200 ft.; 70 mi. N. of Silver City (Wilderness area, 7,200 ft.); 2 mi. S. of Raton Pass, 7,700 ft.; 18 mi. S. of Taos, 6,000 ft.; Cimarron Canyon, 6,500-6,700 ft.

Myrmecocystus mimicus Wheeler. This common representative of arid habitats was taken at the following representative localities: Galesteo, 6,000 ft.; 18 mi. S. of Taos, 6,000 ft.; 2 mi. N. of San Juan, 5,900 ft.; 25 mi. S. of Las Vegas, 5,500 ft.; Magdalena, 6,800 ft.; 3 mi. S. of Embudo, 5,900 ft.; 9 mi. E. of Mountainair, 6,000 ft.; 6 mi. N. of Las Cruces, 4,200 ft.; Albuquerque, 6,000 ft. All nests were in very arid places and were accompanied by crater mounds of pebbles, sand or (in one instance) soil and twigs.

Myrmecocystus semirufa Forel. I was able to find this species only in the White Sands National Monument area. The nests which were supported by neat, circular, sand craters were in open level sand areas with bunchgrasses and yucca between dunes. The gasters of the living workers were a brilliant metallic blue color which disappeared after the specimens had been placed in preservative.

Genus POLYERGUS Latreille

Polyergus lucidus Mayr. A single colony was found beneath a stone on an open, grassy, moist area beneath lava rocks at the base of Capulin Mountain National Monument, 7,200 ft.

Polyergus rufescens breviceps Emery. Nests under stones in areas of pine were at the following places: Sapello Canyon, Beulah, 6,900 and 8,000 ft.; Cimarron Canyon, 4,750 ft.; Ute Park, 7,400 ft. The stone covering the Ute Park nest was densely banked with detritus. The slave species in each colony was *Formica fusca* L.